



Force for Good

TALEN ENERGY

Q1 2021 Investor Update
May 6, 2021

Non-GAAP Financial Measures

We include in this presentation EBITDA, Adjusted EBITDA, Adjusted Free Cash Flow, Realized Energy Margin, and Realized Gross Margin which are not financial measures prepared under United States Generally Accepted Accounting Principles (“GAAP”). Non-GAAP measures, such as EBITDA, Adjusted EBITDA, Adjusted Free Cash Flow, Realized Energy Margin, and Realized Gross Margin, do not have definitions under GAAP and may be defined differently by, and not be comparable to, similarly titled measures used by other companies or used in our credit facilities, the indentures governing our notes or any of our other debt agreements. Generally, a non-GAAP financial measure is a numerical measure of financial performance, financial position, or cash flows that excludes (or includes) amounts that are included in (or excluded from) the most directly comparable measure calculated and presented in accordance with GAAP. Management cautions investors not to place undue reliance on such non-GAAP measures but also consider them with their most directly comparable GAAP measures. EBITDA, Adjusted EBITDA, Adjusted Free Cash Flow, Realized Energy Margin, and Realized Gross Margin have limitations as analytical tools and should not be considered in isolation or as a substitute for analyzing our results as reported under GAAP. See Annex A for more information on how we define these non-GAAP financial measures.

Market and Industry Data

This presentation has been prepared by Talen Energy and includes market data and other information from independent industry publications and surveys and our own research and knowledge of the industry. Some data are also based on management’s estimates, which are derived from our review of internal sources as well as the independent sources described above. Although we believe these sources are reliable, we have not independently verified the information and cannot guarantee its accuracy and completeness. As a result, you should be aware that market share, ranking and other similar data set forth in this presentation, and estimates and beliefs based on such data, may not be reliable.

Forward Looking Statements

Statements contained in this presentation concerning expectations, beliefs, plans, objectives, goals, strategies, future events or performance and underlying assumptions and other statements that are not statements of historical fact are “forward-looking statements.” These statements often include words such as “believe,” “expect,” “anticipate,” “intend,” “plan,” “estimate,” “target,” “project,” “forecast,” “seek,” “will,” “may,” “should,” “could,” “would” or similar expressions. Although we believe that the expectations and assumptions reflected in these statements are reasonable, there can be no assurance that these expectations will prove to be correct. Forward-looking statements are subject to many risks and uncertainties, and actual results may differ materially from the results discussed in forward-looking statements. In addition to the specific factors discussed in “Significant Business Risks” in our financial statements, the following are among the important factors that could cause actual results to differ materially from the forward-looking statements: Talen Energy’s or its subsidiaries’ levels of indebtedness; the terms and conditions of debt instruments that may restrict Talen Energy’s ability to operate its business; operational, price and credit risks in the wholesale and retail electricity markets; the effectiveness of Talen Energy’s risk management techniques, including hedging, with respect to electricity and fuel prices, interest rates and counterparty credit and non-performance risks; methods of accounting and developments in or interpretations of accounting requirements that may impact reported results, including with respect to, but not limited to, hedging activity; Talen Energy’s ability to forecast the actual load needed to perform full-requirements sales contracts; the effects of transmission congestion due to line maintenance outages and the performance of transmission facilities and any changes in the structure and operation of, or the pricing limitations imposed by, the Regional Transmission Organization (“RTOs”) and Independent System Operators (“ISOs”) that operate those facilities; blackouts due to disruptions in neighboring interconnected systems; federal and state legislation and regulation, including federal and state tax laws and regulations, and costs of complying with governmental permits and approvals; costs of complying with environmental and related worker health and safety laws and regulations; the impacts of climate change including changes in regulation or their enforcement; the availability and cost of emission allowances; the performance of Talen Energy’s subsidiaries and affiliates, on which its cash flow and ability to meet its debt obligations largely depend; the risks inherent with variable rate indebtedness; disruption in financial markets; acquisition or divestiture activities, including Talen Energy’s ability to realize expected synergies and other benefits from such business transactions; Talen Energy’s ability to achieve anticipated cost savings; the execution and development of our future enterprises, including the ability to permit, develop and construct Talen Energy’s proposed renewable and storage facilities, realization of assumptions underlying our statements regarding future enterprises, and the realization of estimates of valuations of our future enterprises; Talen Energy’s ability to optimize its competitive power generation operations and the costs associated with any capital expenditures; significant increases in operation and maintenance expenses, such as health care and pension costs, including as a result of changes in interest rates; the loss of key personnel (for health or other reasons) and the ability to hire and retain qualified employees; possibility of strikes or work stoppages by unionized employees; war, armed conflicts or terrorist attacks, including cyber-based attacks; and pandemics, including for COVID-19.

Section

Speaker

1) Executive Summary

Ralph Alexander, Chairman & CEO

2) Winter Storm Uri Update

Alex Hernandez, President & CFO

3) Financials, Liquidity, Guidance

Alex Hernandez, President & CFO

4) Q&A

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SECTION 1: EXECUTIVE SUMMARY

Executive Summary

Q1 Results and Uri impact within Guidance; Clean Power Transformation driving Equity Investor Day

- **Impact from Winter Storm Uri within range previously communicated**
 - Financial impact of the Storm is an estimated non-recurring pre-tax loss of \$78 million associated with ERCOT commercial activities, which was within our previously communicated range of \$60 million to \$90 million
 - Maintained adequate liquidity throughout the events with prudent collateral management, Talen RCF utilization, and capacity monetization; Talen RCF has been repaid in full
- **Delivered first quarter 2021 results in line with guidance ranges**
 - Q1 2021 Adjusted EBITDA of \$117 million and Adjusted Free Cash Flow of \$(14) million
 - Colder weather elevated pricing and resulted in plants running more this quarter as compared to last, this was offset by loss of hedge value
- **Continue to invest in the critical maintenance of our fleet with strong safety performance**
 - Completed Susquehanna refueling and maintenance outages on time and on budget; Nueces Bay concluding first major maintenance of all turbines since repowering in 2010; Colstrip currently in Unit 3 overhaul
 - Strong safety performance through Q1 with incident rate of 0.3 which is a 79% improvement since take private
- **Affirming 2021 Adjusted EBITDA and Adjusted Free Cash Flow guidance ranges**
 - Adjusted EBITDA guidance range of \$500-\$600 million, midpoint of \$550 million
 - Adjusted Free Cash Flow guidance range of \$0-\$80 million, midpoint of \$40 million
- **Continue to progress ESG - clean power transformation and being a *Force for Good***
 - Pattern Joint Venture (1.4 Gigawatts) and Battery Storage Development Pipeline (1.0 Gigawatt)
 - Significant execution progress in digital infrastructure initiatives; to discuss during our ESG Equity Day (May 19th)
 - Talen selected as one of Forbes Best Mid-Size Employers, #1 IPP and ahead of Utility Peers

Talen ESG Equity Day Agenda

May 19th at 2:00 PM Eastern Time, Via Webcast

ESG Equity Investor Day Agenda

Wednesday, May 19 | 2:00 p.m. EDT

TALEN ENERGY

Talen as a Force for Good

Ralph Alexander Chairman of the Board and Chief Executive Officer

Talen's approach to ESG and our efforts to lead the energy transition.

The Talen Transformation

Alex Hernandez President, Director, and Chief Financial Officer

Our strategy for transforming Talen into a leading clean power digital infrastructure platform and the anticipated growth in our enterprise value.

Special appearance by **Gary Wojtaszek**, retired CEO of CyrusOne

Our Approach to ESG

Andy Wright General Counsel and Corporate Secretary

Debra Raggio Senior Vice President, Regulatory & External Affairs Counsel

Ryan Price Senior Vice President and Chief Human Resource Officer

A deeper dive into Talen's environmental, social and governance efforts and how we use ESG as a framework for delivering on our Force for Good ambition.

Path to Decarbonization

Cole Muller Vice President, Fossil & Head of Decarbonization

An overview of Talen's path to decarbonization through conversions which will begin with the conversion of our Montour plant.

Investing in a Cleaner Future—Renewable and Battery Storage Efforts

Joey Shannon Head of Renewable Energy Development
Ashley Townsend Head of Battery Storage Development

Talen's renewable energy strategy and an overview of our 2.7 GW pipeline of renewables and battery storage.

Special appearance by **Hunter Armistead**, Chief Development Officer, Pattern Energy

The Convergence of Energy Transition & Digital Infrastructure

Alex Hernandez President, Director, and Chief Financial Officer

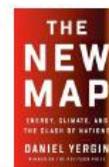
Creation of Cumulus digital infrastructure platform. Converting commoditized electrons to data, digital assets, and services.

Equity Investment Thesis

Olivia Sigo Director of Finance, Investor Relations and ESG
John Chesser Senior Vice President of Finance, Treasurer & Head of M&A

Overview of the equity investment needed to accomplish our vision.

THE DAY WILL FEATURE APPEARANCES FROM TALEN FRIENDS, PARTNERS, AND STAKEHOLDERS, INCLUDING:



Dan Yergin, bestselling author and winner of the Pulitzer Prize

Governor Tom Wolf of Pennsylvania

The Sierra Club

Pattern Energy

King Ranch

IBEW Local 1600

Gary Wojtaszek, Retired CEO of CyrusOne

and more...

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Investing in Our Fleet

Key Maintenance and Planned Outage Activities

Susquehanna

- Refueling and maintenance outage completed on April 23, 2021 in 32 days and on time
 - Outage shifted to start approximately one week earlier than last year
 - Outage start date moved to Monday (vs Saturday) to reduce outage costs
- All work completed on budget with zero OSHA incidents
- Employees and contractors on-site peaked at 2,200
- Significant scope activities included:
 - Unit 2 reactor refueling to support a two-year run
 - Low pressure turbine inspection
 - Installation of new Digital Auto Voltage Regulator
 - Final Unit 2 outage for jet pump slip joint diffuser ring installation

Nueces Bay

- Currently in first major inspection since 2010 repowering of facility
- Outage estimated to last 72 days, with return to operation expected in May
- All work completed to date is on budget with zero OSHA incidents
- Employees and contractors on-site have peaked at 286
- Over 900 major maintenance activities completed
- Significant scope activities included:
 - Gas turbine major overhaul
 - Steam turbine major overhaul
 - Steam turbine generator re-wedge
 - Replacement of 3 of the 4 control valve seats on ST-7 main steam valves
 - Replacement rotor for GT-8
 - Dewatered inlet and outlet tunnels
 - Replaced condenser outlet piping (72")

Colstrip

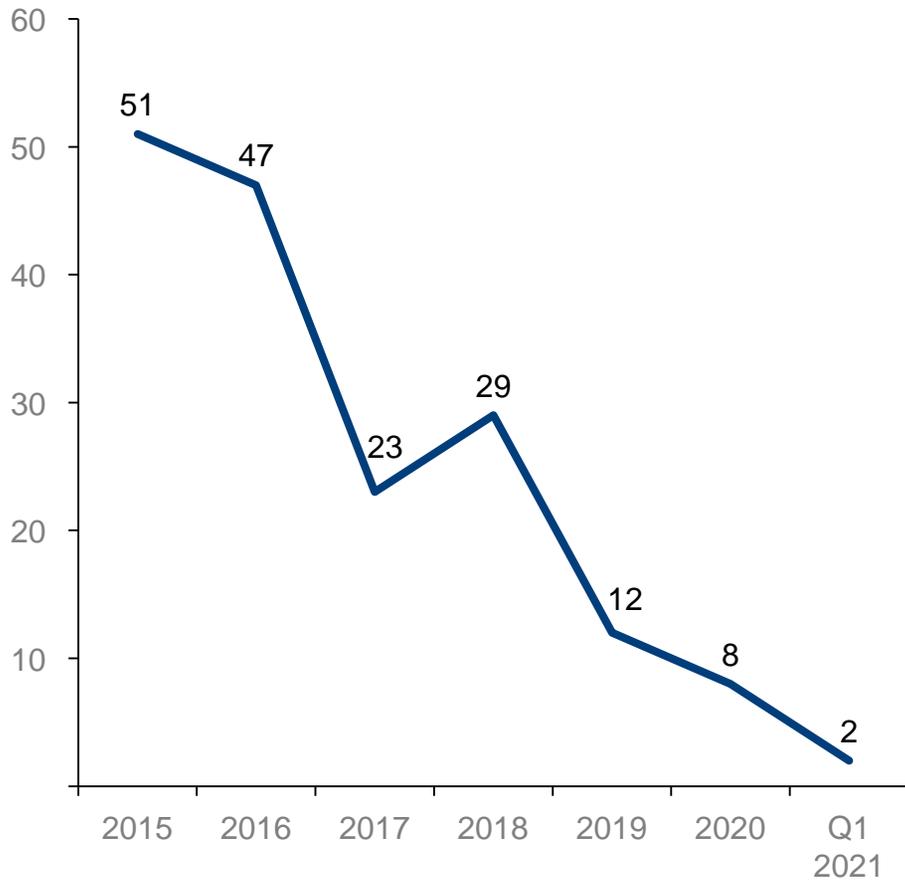
- Currently in Unit 3 overhaul
- Outage estimated to last 76 days, with return to operation expected in late June
- Employees and contractors on-site expected to reach 750+
- Approximately 1,900 maintenance activities expected to be completed
- Significant scope activities included:
 - Steam turbine overhaul and generator inspection
 - Cooling tower fill and structural member replacement
 - Fire pump addition
 - Boiler pressure part inspection and repairs
 - Control system upgrades

Susquehanna outage safely completed, Nueces Bay Triple Major outage is on track, Colstrip maintenance underway

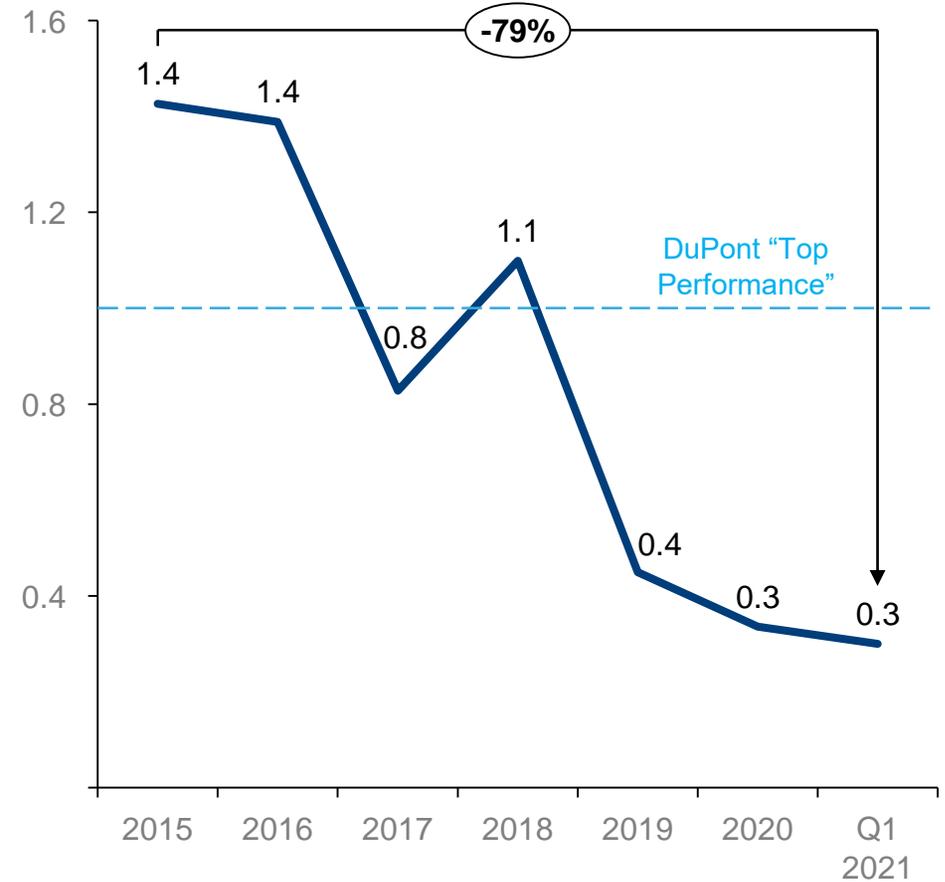
Corporate Safety Trend

OSHA Incident Rate has Significantly Improved

OSHA Incidents⁽¹⁾



OSHA Incident Rate⁽¹⁾⁽²⁾



Q1 2021 Safety Performance is in line with "Top Performance" for OSHA Incident Rate

⁽¹⁾ Includes plants operated by third parties

⁽²⁾ OSHA Incident Rate represents the number of work-related injuries per 100 full-time workers during a one-year period and is calculated by multiplying the number of OSHA reportable injuries and illnesses by 200,000, divided by the total number of employee hours worked. When calculating, 200,000 represents 100 employees working 40 hours a week for 50 weeks during a calendar year

SECTION 2:

WINTER STORM URI UPDATE

Winter Storm Uri Update

Loss within Guidance Previously Communicated

Financial Impact and Key Updates

Based on available information in March and excluding the effect of payment defaults by other market participants and other unknown ERCOT settlement revisions, our initial estimated nonrecurring pre-tax loss was between \$60 million and \$90 million

- Q1 results include an estimated non-recurring pre-tax loss associated with commercial activity during ERCOT Winter Storm Uri of approximately **\$78 million**

Since our last update in March 2021 the following activity has occurred:

- ✓ Settled all counterparty hedges associated with February activity
- ✓ Settled valid invoices for gas procured during Winter Storm Uri
- ✓ ERCOT 55-day resettlement occurred with no significant changes for Talen
- ✓ Ensured adequate liquidity; \$370 million proceeds from the Talen Deferred Capacity Obligations trade and fully repaid \$270 million of Talen RCF draw
- ✓ Active business continuity planning; evaluated winter performance and ongoing reviews to further enhance operational reliability in the future
- ✓ ERCOT instituted “short payments”; the short payment delays the remittance of cash for an uncertain period of time to non-defaulting market participants and will only be paid as ERCOT recovers money from defaulting parties or through default uplift payments
 - In Q1 2021, Talen recognized a separate charge of approximately \$12 million to fully reserve the amounts due to Talen that are subject of short payments
 - Reserve amounts are expected to reverse in due course as the scope and nature of ERCOT’s default recoveries become known

\$78 million Winter Storm Uri loss is within the range communicated

Winter Storm Uri Update

Monitoring Key Risks Closely

Key Risks

ERCOT Market Systemic Risks

- ERCOT market participant defaults currently total ~\$3 billion⁽¹⁾, which has resulted in ERCOT not fully paying all of its market participants what they are owed, instituting “short payments”
- ERCOT will also implement uplift default charges to all market participants, currently capped system-wide at \$2.5 million per month to fund repayment of short payments to non-defaulting market participants

Regulatory, Litigation and Investigation Risks

- State, local, and federal governments and various regulatory agencies have announced investigations and have made requests for information from ERCOT and some ERCOT participants to determine the causes of the market disruption and its impact on consumers
- Talen, along with other owners of generation facilities in Texas, has received inquiries from ERCOT and FERC regarding operations during the winter storm period
- The efforts by state and federal governments and regulatory agencies may result in changes to regulations that impact our industry
- Such investigations and inquiries may also result in enforcement actions against individual companies
- Following the winter events and market disruption, certain Talen subsidiaries along with over 160 other market participants in ERCOT have been sued in various Texas state courts for, among other things, personal injury and property damage

Continue to stay engaged with key stakeholders on various risks which may impact our business

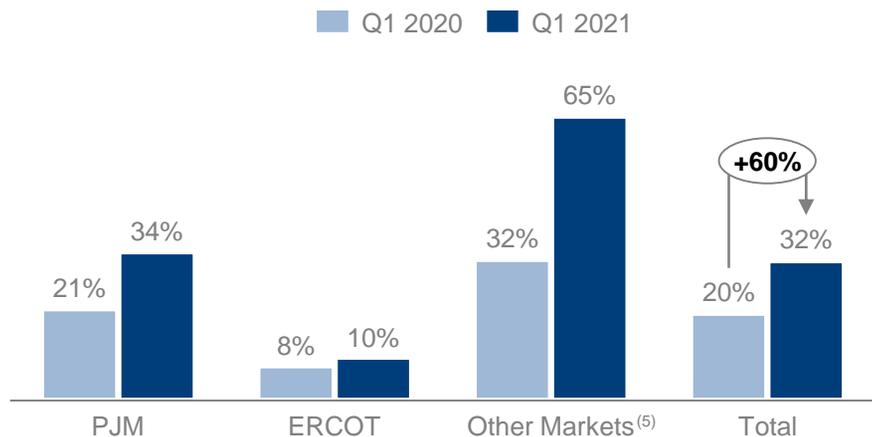
(1) As of April 30, 2021

SECTION 3: FINANCIAL RESULTS, LIQUIDITY, & GUIDANCE

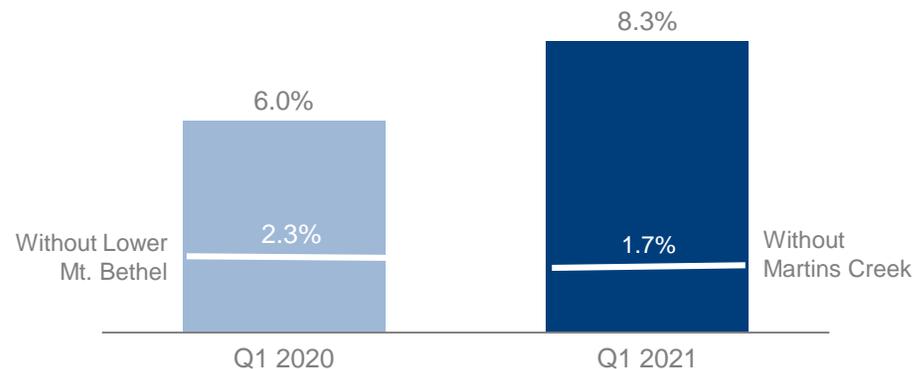
Operational Update

Generation and Capacity factors up given stronger winter in PJM and ERCOT

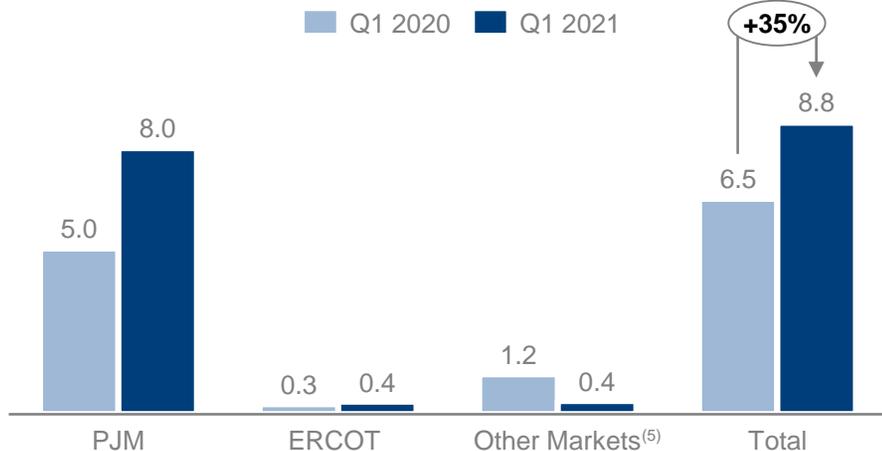
Generation: Capacity Factors⁽¹⁾



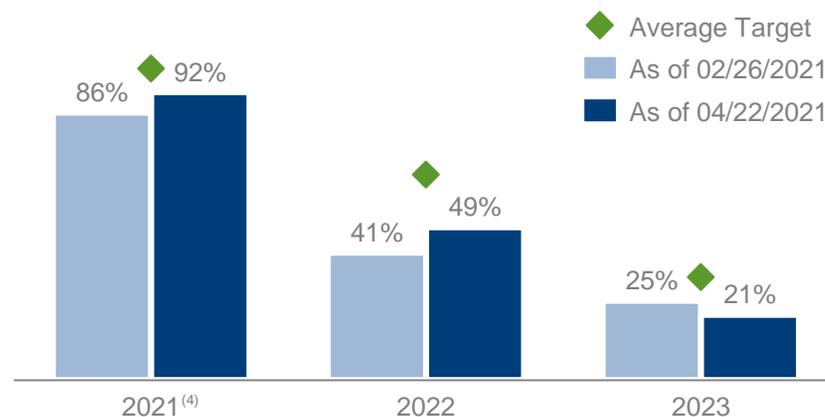
Fleet Equivalent Forced Outage Factor⁽²⁾



Generation: MWh Output (in millions)



Total Portfolio Generation Hedges⁽³⁾



Q1 2021 generation increase is primarily driven by PJM which experienced closer to average winter in 2021

(1) Capacity Factor = Generation output in MWh / Net Dependable Capacity in MWh

(2) Equivalent Forced Outage Factor = (forced outage hours + equivalent forced derated hours) / period hours (all hours) x 100

(3) Hedge percentages based upon expected generation value; market exposure changes daily and expected generation is subject to change based on market conditions

(4) Represents balance of year from indicated at the prevailing 'as of' date

(5) Q1 2020 includes NGG

Financial Summary Results

Delivered \$117MM of Adjusted EBITDA

(\$ in millions)

Q1 2021

Operating & Financial Summary

GWh Generated		8,802
Capacity Revenues	\$	78
Realized Energy Margin		111
Total Realized Gross Margin ⁽¹⁾	\$	189
Adjusted EBITDA	\$	117
Adjusted EBITDA less Capital expenditures ⁽⁸⁾		55
Adjusted Free Cash Flow ⁽⁹⁾		(14)
Unrestricted Cash ⁽²⁾	\$	686
Total Assets ⁽²⁾		8,658
Consolidated Net Debt ⁽²⁾⁽³⁾⁽⁴⁾		3,295
Recourse Net Debt ⁽²⁾⁽⁴⁾		2,968
Adjusted EBITDA (TTM)		
Recourse Adjusted EBITDA ⁽⁵⁾	\$	432
Non-Recourse Adjusted EBITDA ⁽⁶⁾		51
Consolidated Adjusted EBITDA	\$	483
Credit Metrics (TTM)		
Senior Secured Leverage Ratio ⁽⁷⁾		3.0x
Consolidated Leverage Ratio		6.6x

Note: Refer to Annex A for reconciliation of non-GAAP financial measures to the most directly comparable measure calculated in accordance with GAAP

(1) Realized Gross Margin excludes unrealized mark-to-market gains and losses on commodity derivative instruments. Excludes nuclear fuel amortization

(2) As of end of period

(3) Net of restricted cash at non-recourse subsidiaries

(4) Net of unrestricted cash, unamortized debt issuance fees, and unamortized premium / (discount)

(5) Recourse TTM Adjusted EBITDA includes \$29MM of cash distributions from LMBE-MC. LMBE-MC Adjusted EBITDA is net of \$29MM of cash distributions during the period

(6) Primarily comprised of LMBE-MC Adjusted EBITDA and other unrestricted subsidiary

(7) Calculated in accordance with the applicable governing credit agreement covenant computation, which allows for certain adjustments to reported Adjusted EBITDA. See appendix for more information

(8) Includes insurance recoveries in connection with equipment repairs due to forced outage events ; excludes growth and development capital expenditures

Q1 2021 Review

Total Realized Gross Margin⁽¹⁾ of \$189 million in Q1 2021

- Energy margin associated with generation was the biggest driver of value offset by hedge losses, which were primarily driven by Winter Storm Uri

Adjusted EBITDA of \$117 million in Q1 2021

- Continue to stay focused on cost discipline and optimizing cost structure with dispatch profile

Adjusted EBITDA less Capex of \$55 million in Q1 2021

- \$62 million of capital expenditures⁽⁸⁾

Adjusted Free Cash Flow of \$(14) million in Q1 2021 reflects Adjusted EBITDA less Capex⁽⁸⁾ :

- \$63 million of Talen Energy Supply interest and finance charge payments
- \$6 million of LMBE-MC interest and finance charge payments

Ended Q1 2021 with:

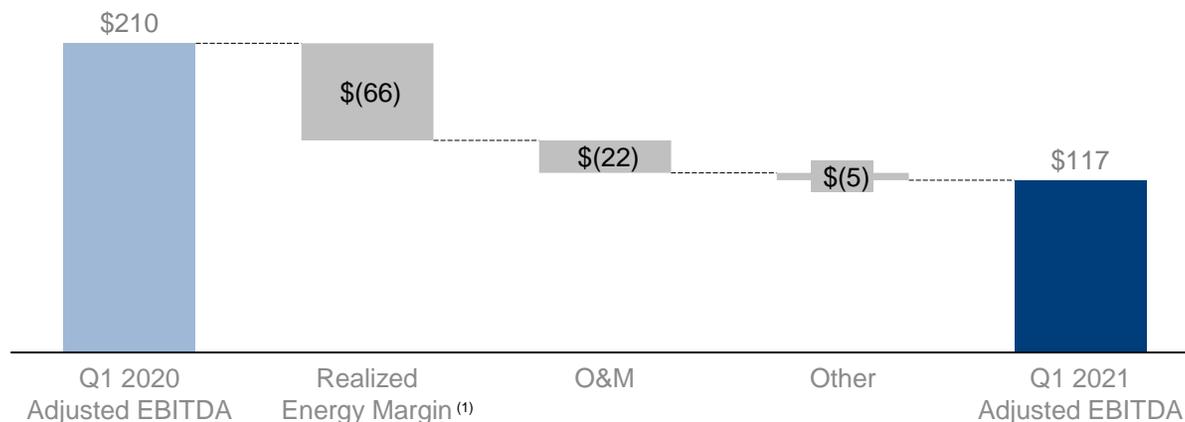
- \$686 million of cash (unrestricted)
- \$54 million commodity exchange margin deposits (restricted)
- \$43 million project debt / major maintenance reserves (restricted)

Year Over Year Comparison

Decreased Adjusted EBITDA Driven by Lower Realized Energy Margin

Adjusted EBITDA Walk – Q1 2020 vs Q1 2021

(\$ in millions)



Key Drivers

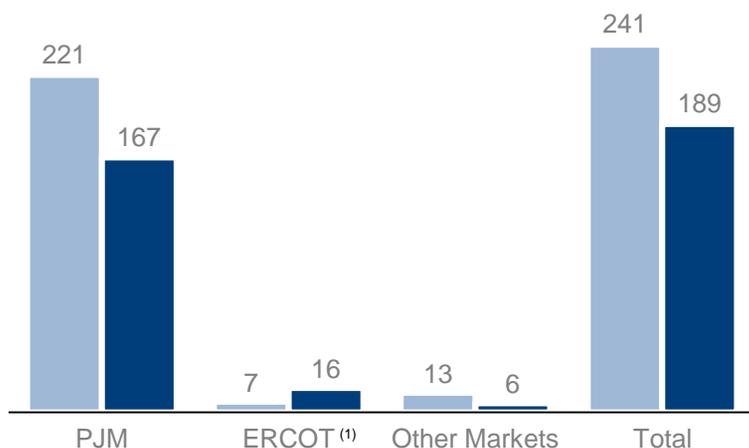
Realized Energy

- Decrease primarily due to lower hedge results as PJM prices recovered from the record warm winter in 2020, partially offset by margin associated with electric generation from higher capacity factors and higher around the clock prices at Susquehanna

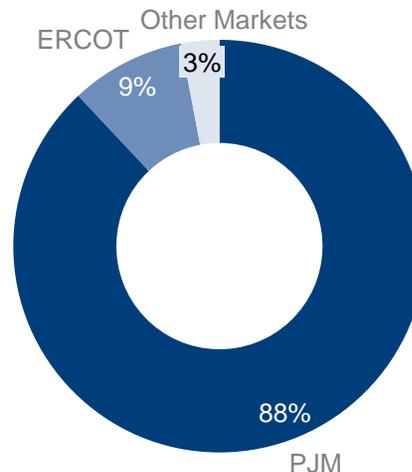
Realized Energy Margin by Market

(\$ in millions)

■ Q1 2020 ■ Q1 2021



Q1 2021 Contribution %



O&M / Other

- Timing of annual Susquehanna refueling outage starting one week earlier compared to the prior year
- Higher operational costs due to lower joint owner recoveries for certain cumulative employee benefit costs in 2020

Note: Refer to Annex A for reconciliation of non-GAAP financial measures (Adjusted EBITDA and Realized Energy Margin) to the most directly comparable measure calculated in accordance with GAAP
 (1) Excludes Winter Storm Uri impact; \$78 million related to commercial activity

Capital Structure and Liquidity

\$991MM Total Liquidity Available

Summary

- Extended Unsecured LCF-1 expiry from June 2021 to June 2023 in April
- Repaid the \$270 million draw on Talen RCF in March that was borrowed to support February ERCOT market volatility
- Executed Talen Deferred Capacity Obligations that accelerated cash collection on PJM capacity revenues which provided \$370 million of additional unrestricted cash
- In February, remarketed \$131 million Talen 2038 PEDFA Series 2009B / 2037 PEDFA Series 2009C bonds; utilizes LCs support
- Talen's lien-based ISDAs mitigated collateral and working capital requirements during Winter Storm Uri

Talen Energy Supply Liquidity Position

(\$ in millions)

	March 2021
Unrestricted Cash	\$ 686
(+) Talen RCF Capacity ⁽¹⁾	690
(-) Talen RCF Direct Bank Borrowings	-
(-) Talen RCF LCs Issued	(385)
Total Liquidity	\$ 991
(+) Talen Unsecured LCFs ⁽²⁾	200
(-) Talen Unsecured LCFs (issued)	(7)
Total Liquidity + Talen Unsecured LCFs	\$ 1,184

No Significant Recourse Debt Maturities until 2025/2026

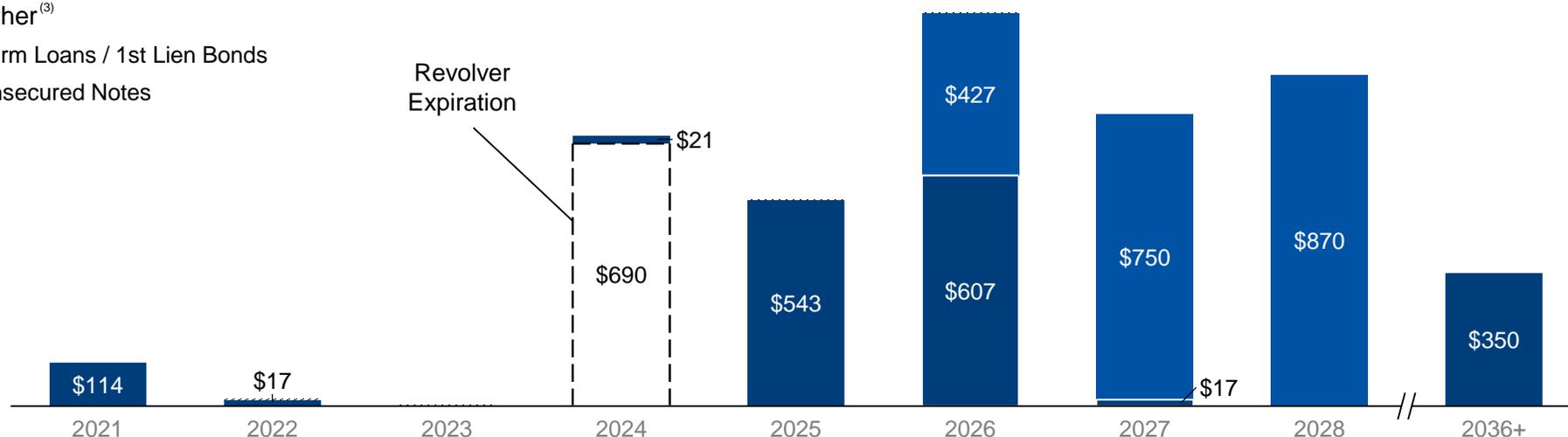
(\$ in millions)

March 2021

Other⁽³⁾

Term Loans / 1st Lien Bonds

Unsecured Notes



(1) Available Revolver liquidity subject to 4.25x senior secured leverage ratio covenant in Talen RCF at each quarter-end

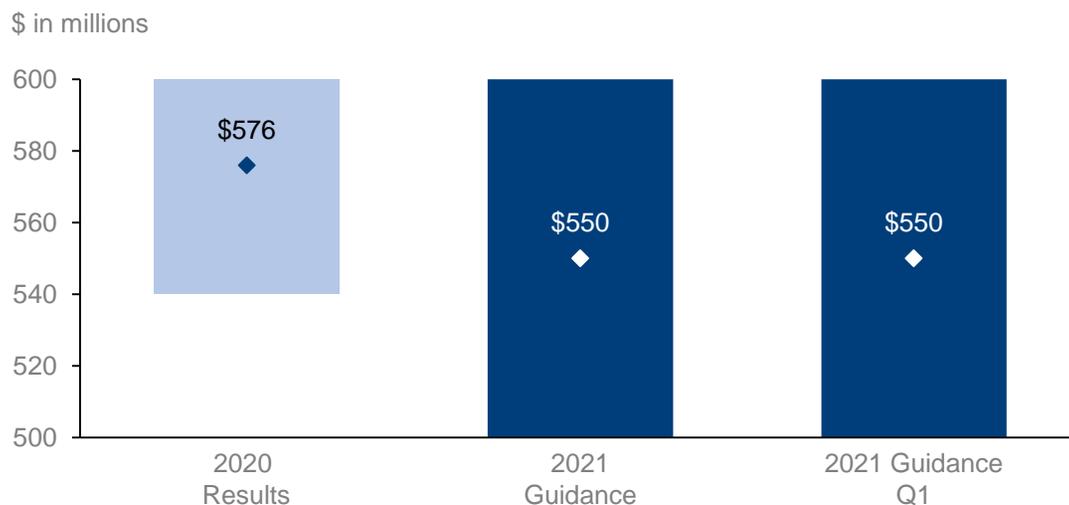
(2) Talen Unsecured LCF-1 expires in June 2023 and Talen Unsecured LCF-2 expires in December 2021

(3) Applicable high yield discount obligations - see "Talen Senior Unsecured Notes" under footnote 17 in the Talen Energy Supply December 31, 2020 audited financial statements

2021 Guidance Update

2021 Guidance of Adjusted EBITDA: \$500-600MM; Adjusted FCF \$0-\$80MM

Adjusted EBITDA

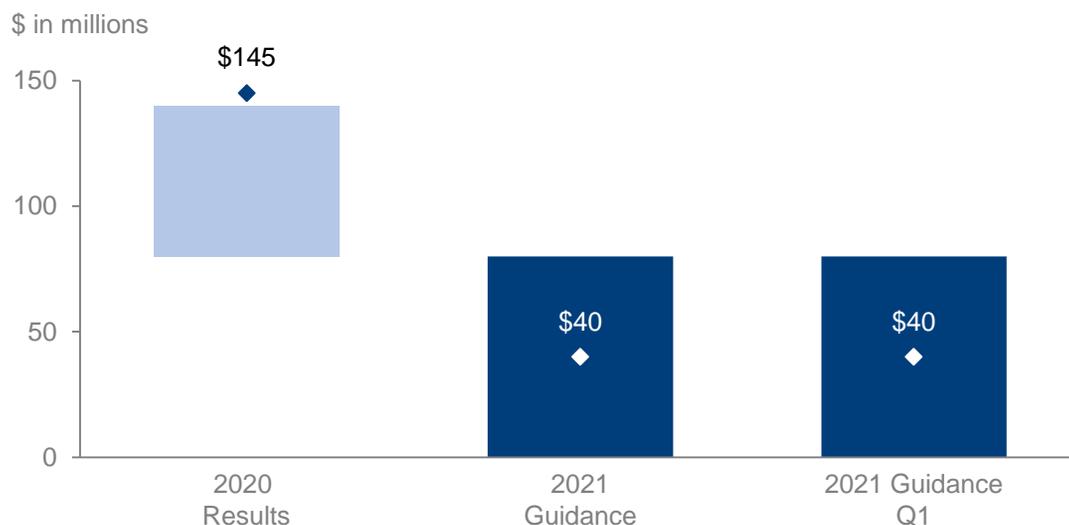


Key Highlights

- Adjusted EBITDA and Adjusted Free Cash Flow are tracking close to expectations
- No update to guidance at this time
- Adjusted EBITDA:** Reflective of weak energy market conditions, despite PJM capacity revenue increase

	Range (\$ millions)	Midpoint (\$ millions)
Q1 2021	\$500-\$600	\$550

Adjusted Free Cash Flow



- Adjusted EBITDA less Capex⁽¹⁾: ~\$355 million**
- Adjusted Free Cash Flow⁽²⁾:** Reflective of an expected increase in capital expenditure and costs

	Range (\$ millions)	Midpoint (\$ millions)
Q1 2021	\$0-\$80	\$40

(1) Includes insurance recoveries for repairs and Other

(2) Excludes growth and development capital expenditures

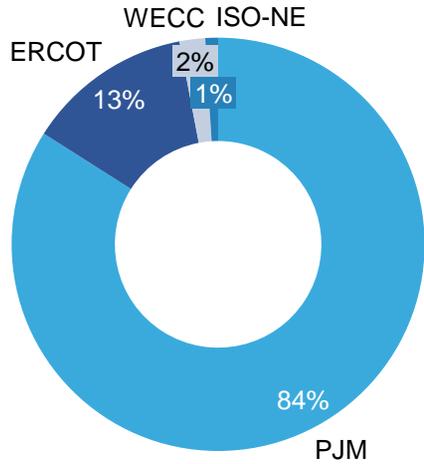
Financial information displays results with Non-GAAP adjustments to arrive at reported Adjusted EBITDA and Adjusted Free Cash Flow. Full Non-GAAP definitions can be found in Annex A

APPENDIX

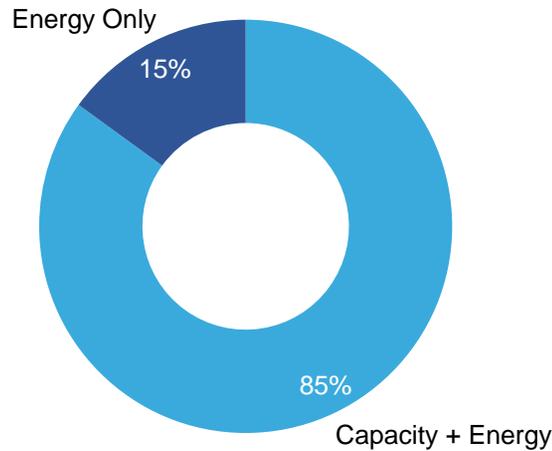
Talen Energy Overview

As of March 31, 2021

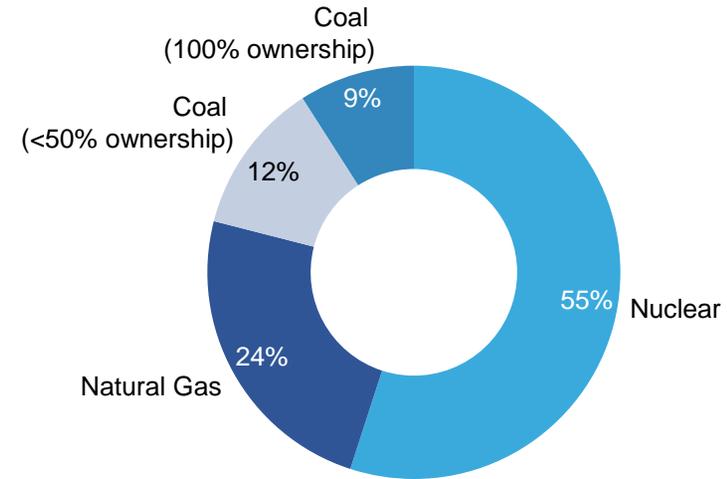
Market Overview (MW)



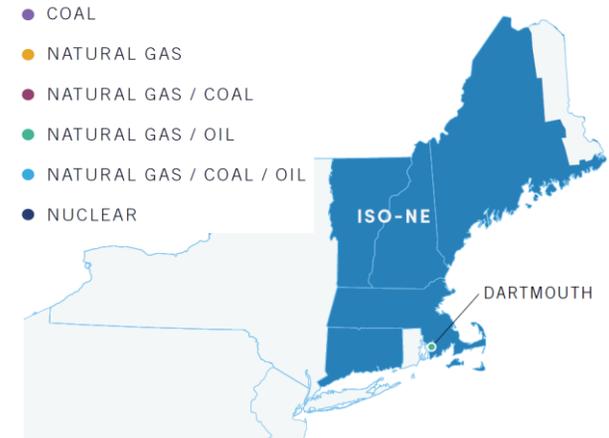
Market Construct (MW)



Fuel Diversity (MWh)⁽¹⁾



Talen Geographic Overview



- COAL
- NATURAL GAS
- NATURAL GAS / COAL
- NATURAL GAS / OIL
- NATURAL GAS / COAL / OIL
- NUCLEAR

~13 GW of Total Portfolio Capacity

(1) Figures based on TTM Q1 2021 MWh production; excludes NorthEast Gas Gen as of Q2 2020

Talen Asset Portfolio

As of March 31, 2021



Asset	Location	Primary Fuel Type	Ownership	Owned Capacity (MW) ⁽¹⁾	Net Heat Rate (Btu / kWh)	COD	Region
PJM							
Susquehanna ⁽²⁾	PA	Nuclear	90%	2,256	N/A	1983 - 1985	PJM-PPL/MAAC
Martins Creek ⁽³⁾	PA	Natural Gas	100%	1,692	11,744 (Gas) / 10,676 (Oil)	1975 - 1977	PJM-PPL
Montour	PA	Coal	100%	1,508	9,661	1972 - 1973	PJM-PPL
Brunner Island ⁽³⁾	PA	Natural Gas	100%	1,449	9,842	1961 - 1969	PJM-PPL
Brandon Shores	MD	Coal	100%	1,298	10,252	1984 - 1991	PJM-BGE
H.A. Wagner ⁽³⁾	MD	Coal	100%	839	10,663	1956 - 1972	PJM-BGE
Lower Mt. Bethel	PA	Natural Gas	100%	594	7,170	2004	PJM-PPL
Conemaugh ⁽²⁾	PA	Coal	22%	388	9,700	1970 - 1971	PJM-MAAC
Peaking units ⁽³⁾⁽⁴⁾⁽⁵⁾	PA	Oil	100%	306	Various	1967 - 1973	PJM-PPL
Keystone ⁽²⁾	PA	Coal	12%	212	9,600	1967 - 1968	PJM-MAAC
Camden ⁽³⁾	NJ	Natural Gas	100%	145	8,675	1993	PJM-PSEG
Newark Bay ⁽³⁾	NJ	Natural Gas	100%	121	8,680	1993	PJM-PS North
Pedricktown ⁽³⁾	NJ	Natural Gas	100%	113	8,455	1992	PJM-EMAAC
York ⁽⁴⁾	PA	Natural Gas	100%	47	9,551	1989	PJM-MAAC
ERCOT							
Barney Davis	TX	Natural Gas	100%	925	10,100 (ST) / 7,100 (CCGTs)	1974 - 2010	ERCOT-South
Nueces Bay	TX	Natural Gas	100%	633	7,100	2010	ERCOT-South
Laredo	TX	Natural Gas	100%	177	8,900	2008	ERCOT-South
Other							
Colstrip Unit 3 ⁽²⁾	MT	Coal	30%	222	10,660	1984 - 1986	WECC
Dartmouth ⁽³⁾	MA	Natural Gas	100%	82	8,715 (CCGT) / 11,326 (Peaker)	1996	ISO-NE SEMA
Total Talen Energy				13,007			

⁽¹⁾ Electric generation capacity (summer rating) is based on factors, among others, such as operating experience and physical conditions which may be subject to revision

⁽²⁾ See Note 13 in Talen's 2020 Consolidated Financial Statements for additional information regarding jointly owned facilities

⁽³⁾ Generation facility has fuel switching and (or) alternate fuel generation capability

⁽⁴⁾ Talen has notified PJM of its intention to deactivate 18 MW of peaking unit capacity in 2021 and to deactivate York in 2022

⁽⁵⁾ LMBE-MC owns 51 MW of peaking unit capacity including 16 MW that LMBE-MC has notified PJM of its intent to deactivate in 2022

Our Markets: Natural Gas

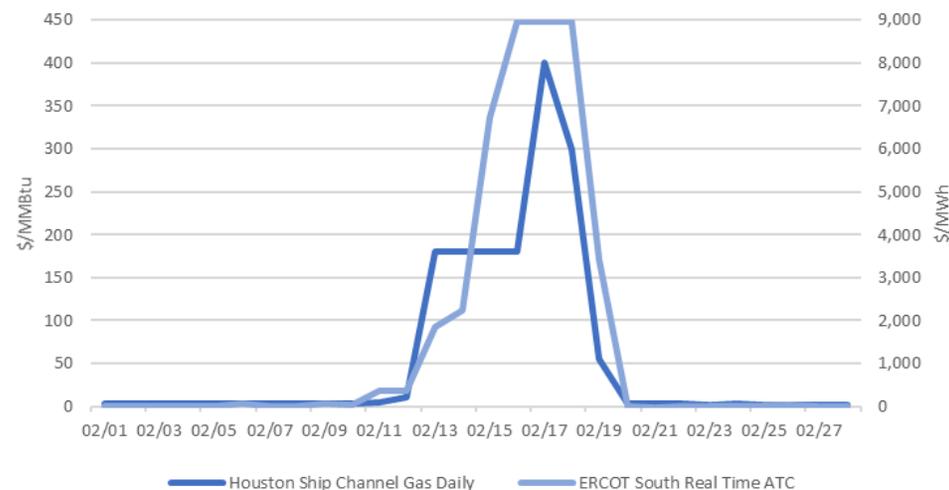
2022 Continuing to Hold Strength

Key Takeaways

Natural gas forward pricing continues to hold strength

- Winter Storm Uri created significant natural gas and power volatility in Texas during the month of February
- 2021 natural gas prices increased primarily as a result of settled winter pricing
- Houston Ship Channel natural gas prices for the remainder of 2021 is ~\$3.03/MMBtu
- 2022 natural gas prices continuing to hold strength based on expectations of tighter fundamentals

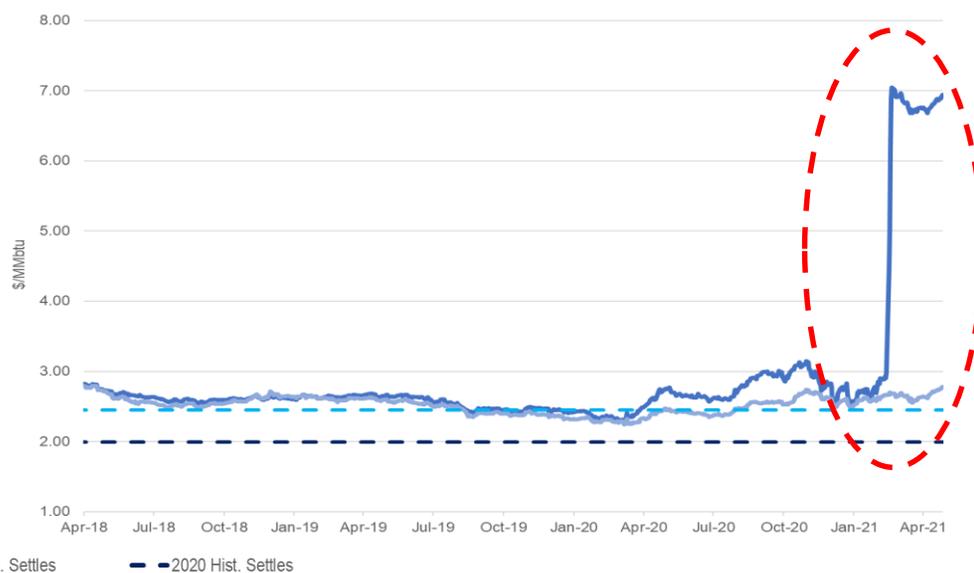
February Gas and Real-Time Power Volatility



Delivered Texas Eastern-M3 Forwards(1)



Houston Ship Channel Forwards(1)



Source: Platts, Intercontinental Exchange, NYMEX
 (1) Forwards as of 4/26/2021; 2021 pricing includes settled prices, where applicable

Our Markets: Wholesale Power Markets



PJM 2022 On-Peak Winter Pricing Continues to Hold Strength

Key Takeaways

ERCOT summer forwards are converging; PJM calendar forwards back in alignment

- ERCOT Summer 2021 forwards have declined given lower price cap on the remainder of 2021 due to Winter Storm Uri while 2022 curve has risen based on expectation of tighter fundamentals; both converging at \$70/MWh
- PJM On-Peak 2022 calendar and winter power prices continue to hold strength

PJM Historical On-Peak Calendar Forwards⁽¹⁾⁽²⁾



ERCOT Historical Summer⁽³⁾ Forwards



PJM Historical On-Peak Winter Forwards⁽¹⁾



Source: Platts, Intercontinental Exchange, ISOs

(1) PJM West Hub day ahead on peak calendar average PJM West Hub day ahead on peak calendar average; winter includes January / February average

(2) Forwards as of 4/26/2021; 2021 pricing includes settled prices, where applicable

(3) ERCOT North Hub real time on-peak Jul / Aug average

Talen Long-Term Debt Maturities

As of March 31, 2021

(\$ in millions)

Recourse Debt	Interest Rate	Credit Ratings			Total	2021	2022	2023	2024	2025 & Beyond
		Moody's	S&P	Fitch						
Secured Debt:										
Talen 2026 TLB	L+3.75%	Ba3	BB-	BB	\$ 427	-	-	-	-	\$ 427
Talen 2027 Secured Notes	7.25%	Ba3	BB-	BB	750	-	-	-	-	750
Talen 2028 Secured Notes	6.63%	Ba3	BB-	BB	470	-	-	-	-	470
Talen 2028 Secured Notes	7.63%	Ba3	BB-	BB	400	-	-	-	-	400
Total Secured Debt					\$ 2,047	\$ -	\$ -	\$ -	\$ -	\$ 2,047
Senior Unsecured Notes:										
Talen 2021 Notes	4.60%	B3	CCC+	B	\$ 114	114	-	-	-	-
Talen 2022 Notes	9.50%	B3	CCC+	B	17	-	17	-	-	-
Talen 2024 Notes	6.50%	B3	CCC+	B	24	-	2	1	21	-
Talen 2025 Notes	6.50%	B3	CCC+	B	543	-	-	-	-	543
Talen 2026 Notes	10.50%	B3	CCC+	B	607	-	-	-	-	607
Talen 2027 Notes	7.00%	B3	CCC+	B	20	-	-	1	-	19
Talen 2036 Notes	6.00%	B3	CCC+	B	119	-	-	-	-	119
Total Senior Notes					\$ 1,444	\$ 114	\$ 19	\$ 2	\$ 21	\$ 1,288
PEDFA Municipal Bonds:										
Talen 2038 PEDFA Series 2009A	6.40%	B3	CCC+	B	\$ 100	-	-	-	-	\$ 100
Talen 2038 PEDFA Series 2009B ⁽¹⁾	0.09%	Aa3	A	N/A	50	-	-	-	-	50
Talen 2037 PEDFA Series 2009C ⁽¹⁾	0.09%	Aa3	A	N/A	81	-	-	-	-	81
Total Municipal Bonds					\$ 231	\$ -	\$ -	\$ -	\$ -	\$ 231
Total Recourse Maturities					\$ 3,722	\$ 114	\$ 19	\$ 2	\$ 21	\$ 3,566
Non-Recourse Debt										
Non-Recourse Debt	Interest Rate	Credit Ratings			Total	2021	2022	2023	2024	2025 & Beyond
		Moody's	S&P	Fitch						
LMBE-MC 2025 TLB ⁽²⁾	L+4.00%	Ba3	BB-	-	\$ 378	36	53	64	60	165
Total Non-Recourse Maturities					\$ 378	\$ 36	\$ 53	\$ 64	\$ 60	\$ 165
					\$ 4,100	\$ 150	\$ 72	\$ 66	\$ 81	\$ 3,731

⁽¹⁾ Subject to mandatory repurchase at the option of the holder and accrue interest at a variable rate in accordance with the provisions of the trust indenture. See Note 17 in 2020 annual financials for more information; Enhanced credit rating based on the support provided via letter of credit

⁽²⁾ Future period maturities represent values required to achieve minimum target debt balances under the LMBE-MC Credit and Guaranty Agreement

Adjusted EBITDA and Disclosure

Recourse Leverage Overview

<i>(\$ in millions)</i>	Q1 2021 TTM
Consolidated Adjusted EBITDA ⁽¹⁾	\$ 483
Unrestricted subsidiaries Adjusted EBITDA	80
LMBE-MC Cash Distributions ⁽²⁾	(29)
(-) Unrestricted subsidiaries	51
Recourse Adjusted EBITDA	432
(+) Recourse Expected Cost Savings ⁽³⁾	16
Recourse Adjusted EBITDA - Debt Compliance ⁽³⁾	\$ 448
Consolidated Net Debt ⁽⁴⁾⁽⁵⁾	\$ 3,295
Recourse Net Debt ⁽⁴⁾	\$ 2,968
Senior Secured Leverage Ratio ⁽⁶⁾	3.0x
Consolidated Leverage Ratio	6.6x

(1) A reconciliation to the most directly comparable US GAAP financial measure can be found in "Management Discussion and Analysis of Financial Conditions and Results of Operations"

(2) The net income of any entity that is not a restricted subsidiary will be included only to the extent of the amount of dividends or similar cash distributions

(3) Consistent with debt compliance calculations

(4) Net of unrestricted cash, unamortized debt issuance fees, and unamortized premium and (discount)

(5) Net of restricted cash at project-financed subsidiaries with non-recourse indebtedness

(6) Calculated in accordance with the applicable governing credit agreement covenant computation, which allows for certain adjustments to reported Adjusted EBITDA. See appendix for more information

SUMMARY FINANCIAL RESULTS: **TALEN ENERGY SUPPLY, LLC &** **SUBSIDIARIES**

Consolidated Statements of Operations



(\$ in millions)	Three Months Ended March 31,	
	2021	2020
Capacity revenues	\$ 78	\$ 81
Energy revenues	347	413
Unrealized gain (loss) on derivative instruments	(106)	(19)
Operating Revenues	319	475
Energy Expenses		
Fuel and energy purchases	(236)	(172)
Nuclear fuel amortization	(24)	(26)
Unrealized gain (loss) on derivative instruments	5	(11)
Gross Margin	64	266
Operating Expenses		
Operation and maintenance	(152)	(148)
General and administrative	(21)	(22)
Postretirement benefits service cost	(1)	(1)
Depreciation, amortization and accretion	(124)	(116)
Restructuring costs	(2)	(6)
Other operating income (expense), net	(16)	130
Operating Income (Loss)	(252)	103
Interest expense and other finance charges	(76)	(127)
Nuclear decommissioning trust funds gain (loss), net	45	(105)
Postretirement benefits gain (loss), net	(8)	(6)
Other non-operating income (expense), net	15	21
Income (Loss) Before Income Taxes	(276)	(114)
Income tax benefit (expense)	63	44
Net Income (Loss)	\$ (213)	\$ (70)

The accompanying Notes to the Condensed Consolidated Financial Statements are an integral part of the financial statements.

Consolidated Balance Sheets



<i>(\$ in millions)</i>	March 31, 2021	December 31, 2020
Assets		
Cash and cash equivalents	\$ 686	\$ 279
Restricted cash and cash equivalents	97	82
Accounts receivable, net	97	145
Inventory, net	407	476
Derivative instruments	424	565
Other current assets	79	61
Total current assets	1,790	1,608
Property, plant and equipment, net	5,050	5,107
Nuclear decommissioning trust funds	1,499	1,470
Derivative instruments	217	205
Other noncurrent assets	102	112
Total Assets	\$ 8,658	\$ 8,502
Liabilities and Equity		
Long-term debt, due within one year	\$ 256	\$ 120
Inventory repurchase obligations	165	165
Deferred capacity obligations	290	—
Accrued interest	72	64
Accounts payable and other accrued liabilities	210	268
Derivative instruments	428	499
Other current liabilities	69	64
Total current liabilities	1,490	1,180
Long-term debt	3,767	3,772
Derivative instruments	282	242
Postretirement benefit obligations	491	495
Asset retirement obligations and accrued environmental costs	727	716
Deferred income taxes	422	491
Other noncurrent liabilities	135	49
Total Liabilities	7,314	6,945
Commitments and Contingencies (Note 13)		
Member's Equity	1,344	1,557
Total Liabilities and Equity	\$ 8,658	\$ 8,502

The accompanying Notes to the Condensed Consolidated Financial Statements are an integral part of the financial statements.

Consolidated Statement of Cash Flows



(\$ in millions)	Three Months Ended	
	March 31,	
	2021	2020
Operating Activities		
Net income (loss)	\$ (213)	\$ (70)
Reconciliation adjustments:		
(Gain) on sale of IEC	—	(144)
Unrealized (gains) losses on derivative instruments	92	70
Nuclear fuel amortization	24	26
Depreciation, amortization and accretion	129	120
Nuclear decommissioning trust funds (gain) loss, net (excluding interest and fees)	(37)	112
Deferred income taxes	(66)	(56)
Other	15	58
Change in assets and liabilities:		
Accounts receivable, net	45	5
Inventory, net	69	9
Other assets	(15)	(48)
Accounts payable and accrued liabilities	(59)	39
Accrued interest	8	(3)
Other liabilities	2	22
Net cash provided by (used in) operating activities	(6)	140
Investing Activities		
Property, plant and equipment expenditures	(29)	(37)
Nuclear fuel expenditures	(38)	(16)
Insurance proceeds	2	15
Proceeds from the sale of IEC	—	155
Nuclear decommissioning trust funds investment purchases	(478)	(791)
Nuclear decommissioning trust funds investment sale proceeds	471	784
Other investing activities	5	1
Net cash provided by (used in) investing activities	(67)	111
Financing Activities		
Talen Energy Supply long-term debt issuance proceeds	131	—
Talen Deferred Capacity Obligation issuance proceeds	370	—
Talen Inventory Repurchase Obligations, net increase (decrease)	—	(15)
Talen RCF, net increase (decrease)	—	140
LMBE-MC long-term debt repayments	(2)	(3)
Other	(4)	(3)
Net cash provided by (used in) financing activities	495	119
Net Increase (Decrease) in Cash and Cash Equivalents and Restricted Cash and Cash Equivalents	422	370
Beginning of period cash and cash equivalents and restricted cash and cash equivalents	361	183
End of period cash and cash equivalents and restricted cash and cash equivalents	\$ 783	\$ 553

See Note 21 for supplemental cash flow information.

The accompanying Notes to the Condensed Consolidated Financial Statements are an integral part of the financial statements.

ANNEX A: RECONCILIATION OF NON-GAAP FINANCIAL MEASURES

Reconciliation of Non-GAAP Financial Measures



Adjusted EBITDA / Adjusted Free Cash Flow

The reconciliation from "Net Income (Loss)" on the Condensed Consolidated Statements of Operations to Adjusted EBITDA and Adjusted Free Cash Flow for the three months ended March 31:

(\$ in millions)	Three Months Ended	
	2021	2020
Net Income (Loss)	\$ (213)	\$ (70)
Adjustments		
Interest expense and other finance charges	76	127
Income tax (benefit) expense	(63)	(44)
Depreciation, amortization and accretion	124	116
Nuclear fuel amortization	24	26
Unrealized (gain) loss on commodity derivative contracts	101	30
Winter Storm Uri commercial losses, net (a)	78	—
Net periodic defined benefit cost (b)	9	7
Restructuring costs	2	6
Impairments, canceled projects, obsolescence, and receivable allowances (c)	14	34
(Gain) loss on non-core asset sales (d)	—	(144)
Legal settlements and liquidated damages	2	14
Nuclear decommissioning trust funds (gain) loss, net	(45)	105
Other (e)	8	3
Total Adjusted EBITDA	117	210
Capital expenditures, net (f)	(62)	(36)
Talen Energy Supply interest and finance charge payments	(63)	(69)
LMBE-MC interest and finance charge payments	(6)	(6)
Total Adjusted Free Cash Flow	\$ (14)	\$ 99

(a) Represents net losses incurred within "Energy Revenues" and "Fuel and energy purchases" on the Condensed Consolidated Statement of Operations related to Winter Storm Uri.

(b) Consists of "Postretirement benefits service cost" and "Postretirement benefits gains (loss), net" on the Condensed Consolidated Statements of Operations.

(c) See Notes 4, 8 and 11 in Notes to the Condensed Consolidated Financial Statements.

(d) See Note 7 in Notes to the Condensed Consolidated Financial Statements.

(e) 2021 primarily includes certain operation and maintenance expenses incurred related to: (i) Winter Storm Uri; and (ii) Martins Creek fire repairs that are pending insurance recovery.

(f) Includes insurance recoveries in connection with equipment repairs due to forced outage events; excludes growth and development capital expenditures

Reconciliation of Non-GAAP Financial Measures



Realized Energy Margin

Reconciliation of Realized Energy Margin to "Gross Margin" on the Condensed Consolidated Statements of Operations for the three months ended March 31:

(\$ in millions)

	2021	2020	Change
Electricity sales and ancillary services	\$ 1,327	\$ 204	\$ 1,123
Realized hedging gain (loss), net (a)	(980)	209	(1,189)
Energy revenues	347	413	(66)
Fuel expense and energy purchases	(411)	(144)	(267)
Realized hedging gain (loss), net (a)	175	(28)	203
Realized Energy Margin	111	241	(130)
Add (Less):			
Capacity revenues	78	81	(3)
Unrealized gain (loss) on derivative instruments, net	(101)	(30)	(71)
Nuclear fuel amortization	(24)	(26)	2
Gross Margin	\$ 64	\$ 266	\$ (202)
Electric Generation (thousands of MWh) (b)	8,802	6,553	2,249
Realized Energy Margin (\$/MWh)	\$ 12.61	\$ 36.78	\$ (24.17)
Capacity Factor	31.53 %	20.37 %	11.16
Equivalent Forced Outage Factor	8.26 %	6.01 %	2.25

(a) Includes the gain (loss) on non-derivative physical commodity transactions utilized for economic hedging purposes, where applicable.

(b) Generated MWhs sold after consumption for station use where applicable.

Realized Energy Margin by region for the three months ended March 31:

	Realized Energy Margin				Electric Generation (MWh) (a)				Realized Energy Margin			
	2021	2020	change	%	2021	2020	change	%	2021	2020	change	%
PJM	\$ 167	\$ 221	\$ (54)	(24)	8,031	5,013	3,018	60	\$ 20.79	\$ 44.09	\$ (23.30)	(53)
ERCOT	(62)	7	(69)	(986)	376	322	54	17	(164.89)	21.74	(186.63)	(858)
Other markets	6	13	(7)	(54)	395	1,218	(823)	(68)	15.19	10.67	4.52	42
Total	\$ 111	\$ 241	\$ (130)	(54)%	8,802	6,553	2,249	34 %	\$ 12.61	\$ 36.78	\$ (24.17)	(66) %

(a) Generated MWhs sold after consumption for station use where applicable.

Definitions of Non-GAAP Financial Measures

This presentation includes financial information prepared in accordance with GAAP, as well as the non-GAAP financial measures of Realized Energy Margin, Adjusted EBITDA and Adjusted Free Cash Flow discussed below, which we use as measures of our operating performance. Non-GAAP financial measures do not have definitions under GAAP and may be defined and calculated differently by, and not be comparable to, similarly titled measures used by other companies. These non-GAAP measures are not intended to replace the most comparable GAAP measure as an indicator of performance. Generally, a non-GAAP financial measure is a numerical measure of financial performance, financial position, or cash flows that excludes (or includes) amounts that are included in (or excluded from) the most directly comparable measure calculated and presented in accordance with GAAP. Management cautions readers of this financial information not to place undue reliance on such non-GAAP financial measures but to also consider them with their most directly comparable GAAP measures. Realized Energy Margin, Adjusted EBITDA and Adjusted Free Cash Flow have limitations as analytical tools and should not be considered in isolation or as a substitute for analyzing our results as reported under GAAP.

Realized Energy Margin, a key non-GAAP financial measure, is a useful metric utilized by our chief operating decision makers to assess the performance of our core operations against our strategic priorities and business plans. It represents a combination of sales of generated electricity, sales of purchased power and physical natural gas, fuel expense, purchased energy expense, fuel transportation expense, and realized settlements from economic hedging activities. It is calculated by adjusting gross margin to exclude capacity revenues, unrealized mark-to-market gains and losses on derivative instruments and nuclear fuel amortization. This measure is not intended to replace "gross margin," which is the most comparable measure calculated in accordance with GAAP.

"Energy revenues" and "Fuel and energy purchases" are evaluated collectively as Realized Energy Margin because the price for power is generally determined by the variable operating cost of the next marginal generator dispatched to meet demand. Our financial performance is highly correlated to how we maximize Realized Energy Margin through management of our generation portfolio and the results of our hedging and optimization activities.

Realized Energy Margin is a supplemental measure that is utilized, in conjunction with other information, by our senior management team and Talen Energy Corporation's Board of Directors to manage our operations and analyze actual results against our budget. We believe Realized Energy Margin is useful to investors and other users of our financial statements who seek to evaluate, consistent with the use by our senior management team, our operating performance because it allows them to compare the energy revenues we produce, less the related costs, on a consistent basis across periods. Realized Energy Margin, to some extent, also provides an additional tool to compare business performance across companies.

We use Adjusted EBITDA and Adjusted Free Cash Flow as a measure of operating performance to assist in comparing performance from period to period on a consistent basis and to readily view operating trends, as a measure for planning and forecasting overall expectations and for evaluating actual results against such expectations, and in communications with our Board of Directors, creditors, analysts and investors concerning our financial performance

Adjusted EBITDA, a key non-GAAP financial measure, is a useful metric utilized by our chief operating decision makers to efficiently evaluate operating results and trends without certain items that may distort financial results and a metric for planning and forecasting overall expectations and for evaluating actual results against such expectations. Adjusted EBITDA is computed by net income (loss) adjusted for certain non-cash items and other items that management believes are not indicative of ongoing operations, including: interest expense and other finance charges; income taxes; depreciation, amortization and accretion; unrealized gains or losses on derivative instruments; nuclear fuel amortization; ERCOT winter weather impacts in 2021 from Winter Storm Uri, net periodic defined benefit cost; restructuring costs; impairments, canceled projects, obsolescence, and certain receivable allowances; gains or losses on sales, dispositions or retirements of assets; fuel supply legal settlements and liquidated damages; gains or losses on the repurchase, modification or extinguishment of debt; gains and losses on securities in the nuclear decommissioning trust funds; gains or loss from the deconsolidation of subsidiaries; non-cash compensation expense; and certain other activity. Cash expenditures for nuclear fuel are presented as "Capital expenditures" in the calculation of Adjusted Free Cash Flow in the below table.

In addition, we believe investors commonly adjust net income (loss) information to eliminate the effect of restructuring nonrecurring expenses, and other non-cash charges which vary widely from company to company, from period to period, and impair comparability. We believe Adjusted EBITDA is useful to investors and other users of the financial statements to evaluate our operating performance because it provides an additional tool to compare business performance across companies and across periods. Adjusted EBITDA is widely used by investors to measure a company's operating performance without regard to such items described above. These adjustments can vary substantially from company to company depending upon accounting policies, book value of assets, capital structure and the method by which assets were acquired.

Adjusted Free Cash Flow, a key non-GAAP financial measure, is a useful metric utilized by our chief operating decision makers to evaluate cash flow activities. Adjusted Free Cash Flow is computed by Adjusted EBITDA reduced by cash interest and finance charges paid and capital expenditures, including nuclear fuel purchases adjusted for the related amortization, and adjusting for property casualty insurance proceeds and expenditures for development and growth.

In addition, we believe investors and other users of our financial statements commonly reduce Adjusted EBITDA by the amount of capital expenditures and cash interest and finance charges, to determine a company's ability to meet future obligations. We believe Adjusted Free Cash Flow is useful to investors and other users of our financial statements in evaluating our operating performance because it provides them with an additional tool to determine a company's ability to meet future obligations and to compare business performance across companies and across periods. Adjusted Free Cash Flow is widely used by investors to measure a company's levered cash flow without regard to items such as taxes, depreciation and amortization, impairment losses, ARO settlements, non-recurring development and growth expenditures, gains or losses on sales, dispositions or retirements of assets, unrealized gains and losses on derivative financial instruments and stock-based compensation expense, which can vary substantially from company to company and period to period depending upon accounting methods and book value of assets, capital structure and the method by which assets were acquired.

Adjusted EBITDA and Adjusted Free Cash Flow are not intended to replace "net income (loss)," which is the most comparable measure calculated and presented in accordance with GAAP.